NEW JERSEY COMMISSION ON PROGRAMS FOR GIFTED STUDENTS

FINDINGS AND RECOMMENDATIONS

JANUARY 2005

NEW JERSEY COMMISSION ON PROGRAMS FOR GIFTED STUDENTS

In January 2002, the New Jersey Legislature authorized the creation of the New Jersey Commission on Programs for Gifted Students. The commission was charged with studying the most effective and efficient method to implement programs for gifted students. The Commission spent more than a year reviewing the work of experts, examining state and local documents and data, and developing the recommendations which are contained in this document. Commission members included:

Appointed Commission Members and Affiliations

Co-Chairs

Theodore J. Gourley, Ed.D.	Rowan University
Patricia Coughlan	New Jersey Association for Gifted Children

Members

Joseph R. Amatuzzi, Ed.D.	New Jersey Association of School Business Officials
Charlotte Bialek	New Jersey School Boards Association
Roberta Braverman	New Jersey Education Association
Janie P. Edmonds, Ed.D.	New Jersey Association of School Administrators
Fran Greb, Ed.D.	Montclair State University
Andrew Monaco	College Student Representative
Daniel Money	New Jersey Principals and Supervisors Association
Linda L. Morse	New Jersey Department of Education
Maureen Pfeffer	New Jersey Congress of Parents and Teachers
Josee Rose	College Student Representative
Barbara Swicord	New Jersey Association for Gifted Children

Legislative Representatives

Assemblywoman Elba Perez-Cinciarelli
Assemblywoman Rose Heck
Senator Robert Martin
Senator Shirley Turner

New Jersey Department of Education Staff

Anthony Bland	Central Region
Nicholas Dotoli	Southern Region
Shelley Fox/Susan Akers	Northern Region

TABLE OF CONTENTS

NEW JERSEY COMMISSION ON PROGRAMS FOR GIFTED STUDENTS
FINDINGS AND RECOMMENDATIONS

INTRODUCTION

Our society values equality and is often uncomfortable with social or intellectual distinctions or hierarchies. Exceptional ability may be viewed as a valuable human resource when it develops a practical solution, tool, or application—but that same talent may be viewed as a troublesome expression of eccentricity when looked at simply as the possession of high levels of thinking or creativity. In a society that continues to value "beauty and brawn" more than "brain," making a case for gifted education is often difficult.

According to a national telephone survey conducted in June 2000 by the National Education Association, New Jersey is one of six states that do not provide funding for gifted education and the only state of those six that mandates identification and services (Robinson, 2002). This situation has not gone unnoticed by local education agencies as they attempt to deal with budget shortages, increased accountability in language arts, science, and mathematics, and the demands of standards-based and whole school reform initiatives. The No Child Left Behind Act of 2001 (NCLB) focuses attention on eliminating educational disparities by providing supportive services to low performing students and schools. Achieving annual yearly progress becomes paramount. While gifted and talented students may not be left behind academically, NCLB threatens the very existence of programs and resources to support programs for high achieving students.

Education of gifted and talented students is at a critical juncture. Even though New Jersey consistently ranks among the top states in SAT scores and the number of students taking Advanced Placement courses, challenging coursework may not be available to all students, especially those attending high poverty, low achieving schools or those attending small schools with limited resources. Failing to identify gifted and talented students early, especially those from high poverty schools may perpetuate the cycle of failure. New Jersey must rise to the challenge of maximizing the potential of all children regardless of their socio-economic status, gender, or ethnicity.

Background

Efforts to promote the education of gifted children in New Jersey can be traced back to 1866 when multi-track classes were introduced. Over the next one hundred years, local school districts experimented with a variety of ways to address the needs of exceptional students. Not until the 1970s did New Jersey take formal action to require schools to provide appropriate services for gifted and talented students. In August 1973 *A Report on the Education of the Gifted and Talented* was submitted to the Commissioner of Education and the State Board of Education. As a result, two statewide conferences were held in 1974 and 1975, along with a series of state and local convocations. The Public School Act of 1975 specified that an element of a thorough and efficient education shall

include “a breadth of program offerings designed to develop the individual talents and abilities of pupils.”

In fiscal year 1977, the department received a special state appropriation for gifted and talented education. With these funds, the Office of Gifted and Talented Education was created within the department to assist local school districts in the development and implementation of gifted programs. A central office program coordinator was hired along with a position in each regional Education Improvement Center. The coordinators offered technical assistance to districts and conducted workshops. These positions contributed to the development of the Commissioner’s Advisory Council on Gifted and Talented Education.

In September 1978, the department released the *Guidelines for Gifted and Talented Educational Programs.* This document provided a definition of giftedness as well as recommendations for identification, differentiated educational plans and programs, facilities and supplies, and staff development. The guidelines were intended to serve as a policy guide to assist district boards of education in the preparation of programs for gifted and talented students.

In September 1979, the Governor signed the Gifted Child Development Act, a law that required public schools to identify gifted students and provide an appropriate education for all gifted and talented students. It required the Commissioner to conduct a study of existing programs and to assess the current status and needs of gifted education in New Jersey. The results of the study were reported to the Governor and the Legislature in April 1981. The study concluded that the New Jersey Department of Education should design identification and program implementation procedures.

In 1987, the Advisory Council worked with department staff to develop *Gifted Education: A State Plan for New Jersey.* The purpose of the plan was to identify department activities that would be initiated to assist local school districts to design educational programs to meet the needs of intellectually and academically gifted students. The plan outlined the need for multiple measures for identification, differentiated programs for gifted students, staff training, and sound evaluation design.

Funding was not continued for the state and regional coordinator positions and the Commissioner’s Advisory Committee was disbanded. It was reconvened in 1993, as the Commissioner’s Ad Hoc Committee on Gifted Education, to develop a white paper on the status of gifted education in New Jersey. The report addressed many of the same concerns outlined in similar papers from the 1970s and 1980s. Unfortunately, department staff had shrunk from a team of four to a single professional who also had responsibility for the visual and performing arts program. When the arts coordinator retired, responsibility for gifted and talented programs was shifted to another professional in the same office, who also had dual program responsibilities.

In 1999, the State Board of Education identified gifted programs as part of their strategic plan, and in 2001, the Board adopted regulations (N.J.A.C. 6A:8-3.1a5) that require K-12

identification as well as programs and services. With the advent of the new regulations, the State Board called for more information on the status of gifted education in the state. Subsequently, a voluntary survey was sent to every public school building in the state with over 1350 surveys, representing 475 local school districts, returned. The survey addressed demographics, identification and services, and teacher training and preparation. A summary of the findings was shared with the State Board of Education and the Commissioner and used by department staff as part of presentations and technical assistance. Unfortunately, the information was never formally released to school districts.

In January 2002, the department shifted responsibility for gifted and talented programs from the Office of Academic and Professional Standards to the three regional offices. One person in each region became responsible for technical assistance and training; however, each regional specialist was assigned other program responsibilities, in addition to gifted education. At the same time, Acting Governor DeFranceso authorized the creation of the New Jersey Commission on Programs for Gifted Students. Much like the advisory and ad hoc committees before, the seventeen member Commission was charged to study the most effective and efficient methods to implement programs for gifted students in New Jersey's public schools. The Commission was asked to study identification processes, programming and services, funding, policies, and procedures for the education of school personnel, and program evaluation strategies. The Commission was further charged with the development of recommendations for the Governor, Legislature, and the Commissioner of Education.

The Process

This report is the result of the Commission's best thinking over an eight month period, beginning in October 2003. Each recommendation is followed by a brief explanation with additional supportive materials in the Appendices.

The Commission brainstormed issues and concerns, studied best practices and research in the field, and drew from the diverse personal and professional experiences of its members. After prioritizing the issues, the Commission discussed possible solutions or strategies, convened subcommittees to work on specialized areas of the report, and presented the findings to other Commission members in an attempt to reach consensus on the recommendations. The full report was then shared with all Commission members for their review and approval prior to release to the Commissioner of Education for submission to the Governor and the State Legislature. Commission members reviewed the entire report twice and voted to accept the document, accept with changes, or reject the recommendations. Two organizations did not support the recommendations.

RECOMMENDATIONS

The Commission submits the following recommendations to strengthen, improve, and support programs and services for gifted and talented students. Commission members acknowledge that many of these recommendations are dependent on funding that may not be available at this time. The Commission further acknowledges that the implementation of these recommendations will require significant commitment by the Governor and State Legislature; the Commissioner of Education, the New Jersey Department of Education, and the State Board of Education; chief school administrators, teachers and district boards of education; state education and professional organizations; institutions of higher education; and representatives from business and industry. We encourage these groups to continue to meet to further this important discussion.

Because funding "drives" so many of these recommendations, the Commission suggests that each recommendation be considered as if funding were available. Furthermore, these recommendations are not in priority order. The Commission acknowledges that not all members of the panel had the same level of support for every recommendation. Nonetheless, the recommendations that follow express the sincere efforts of the seventeen member panel to address the needs of New Jersey's gifted students.

Recommendation 1.1: Advisory Committee on Programs for Gifted Students

The Commission recommends that a permanent Advisory Committee on Programs for Gifted Students be established within the New Jersey Department of Education. The committee should be convened by the Commissioner of Education or his/her designee. Membership should be consistent with the current membership of the Commission but be expanded to include a State Board of Education member with ex-officio status. Representative organizations should be encouraged to designate members that represent the P-16 educational spectrum (e.g., elementary, secondary). The advisory committee should meet quarterly to advise the department on policy issues and current trends in gifted education.

Recommendation 2.1: Full-Time Gifted and Talented Coordinator

The Commission recommends that a designated and dedicated full-time gifted and talented coordinator be hired. The coordinator should be a policy level position, housed in Trenton and appropriately placed in the department. The gifted coordinator could be housed in the Office of Special Education, Academic and Professional Standards, or Innovative Programs. The coordinator should have an extensive background in gifted education, preferably with an advanced degree in the specialty and at least 5 years of teaching experience with gifted and talented students. The coordinator would be responsible for policy decisions, interface with other department staff to ensure that gifted students are considered in policy development, collect and analyze data, and secure grant funding to support department gifted initiatives. In addition, the coordinator would work with the Office of Special Education to address the needs of twice-exceptional students. The gifted coordinator would also manage the Advanced Placement Incentive Program and serve as the department's liaison to the Governor's Schools. The gifted

coordinator should be encouraged to join the State Directors for Gifted Education as well as other national gifted education organizations, and should be encouraged and permitted to attend national, regional, and state conferences to stay abreast of trends and issues.

Recommendation 2.2: Full-time Regional Gifted and Talented Specialists

The Commission recommends that each regional office in the Department of Education have a dedicated gifted and talented program specialist. The program specialists would provide training and technical assistance to school districts and develop resources to assist in the identification of gifted students. The regional specialists would provide support to the Trenton-based coordinator in all aspects of gifted and talented education. The regional specialists would regularly attend national, regional, and state conferences to stay abreast of trends and issues. The regional specialists would convene regular meetings of gifted and talented staff and create supportive networks within each region.

Recommendation 2.3: New Jersey Department of Education Training

The Commission recommends that the department institute regularly scheduled professional development programs for administrators, policy makers, teachers, and other school staff. Training can be conducted by the regional gifted and talented specialists or offered in conjunction with state institutions of higher education and/or gifted organizations. Training opportunities should be statewide with equal access to high quality professional development in all three regions. A professional development plan should be developed that is based on a needs assessment conducted by the department.

Recommendation 2.4: New Jersey Department of Education Web Page

The Commission recommends that the department upgrade its existing Website to feature a separate Web page for gifted and talented programs. Currently, gifted and talented information is difficult to find on the NJDOE website. The gifted Web page could be used to promote professional development programs, provide information on new resources, links, best practices, and policy issues. The page could also feature information and links for students and their parents. The Web page could be an extension of the New Jersey Professional Education Port (NJPEP) or a separate entity, as part of the existing NJDOE Website. The Web page would be developed and maintained by the gifted coordinator and regional specialists. Visitors to the NJDOE Website would be able to visit the gifted Web page in much they same way they now locate information on special education or bilingual education. This resource is extremely important as it would centralize assistance needed to comply with N.J.A.C. 6A:8-3.

Recommendation 2.5: Expand and Improve NJDOE Best Practices Awards

In the 2004-05 school year, the department modified its Best Practices Awards, removing an award for gifted education. The Commission recommends that the NJDOE reestablish this award and further, that it expands the number of Best Practices Awards to ensure that excellence is rewarded at the elementary and secondary school levels. The Commission further recommends that the department use the National Association for Gifted Children's (NAGC) exemplary national standards as the basis for these awards.

Recommendation 2.6: Underrepresented Populations

The Commission recommends that the department provide funds, training, and programmatic support to districts to maximize educational opportunities for gifted minority students, gifted students from low achieving schools, economically-challenged gifted students, and limited English proficient gifted students. State assessment data should be disaggregated to determine the academic achievement of identified gifted students.

Recommendation 3.1: State Policies and Regulations that Support Gifted and Talented Programs

The Commission recommends a number of changes to New Jersey Administrative Code that will improve educational equity and access, improve programs, and provide criteria for state school district evaluations under the new Quality Single Accountability Continuum (QSAC). The proposed changes are as follows:

3.1a. Remove references in N.J.A.C. 6A:8 to "exceptionally able" students and replace with "gifted and talented" students;

3.1b. Adopt the National Association for Gifted Children's *PreK-12 Gifted Program Standards* as the accepted standards of practice and encourage all schools to meet the minimum standards described in the document (see Appendix C); provide an incentive for school districts that align programs with these standards;

3.1c. Amend pupil records regulations to require documentation of gifted and talented identification (e.g., testing, recommendations) and services on student cumulative records; require that such records are forwarded when a student transfers to another school or district;

3.1d. Require articulation between elementary and secondary school programs;

3.1e. Amend regulations to require an identification process that uses multiple measures; and

3.1f. Amend special education regulations to require accommodations and gifted services for twice exceptional students (gifted and talented students who are also eligible for special education services); require that gifted services be included in the student's individualized education plan (IEP) or 504 plan.

Recommendation 3.2: State Policies: Supporting Federal Initiatives

The Commission recommends that New Jersey's state and federal legislators support increased funding for the Jacob Javits Gifted and Talented Act. In addition to supporting research centers, the United States Department of Education (USED) should provide funding to every state to support gifted and talented programs. The Commission also recommends that New Jersey's federal legislators support S-1638, which supports teacher preparation and new teacher mentoring.

Recommendation 4.1: Local Policies and Procedures to Support Gifted and Talented Programs

The Commission recommends that district boards of education be required to develop and approve policy, administrative guidelines, and procedures that address all of the following areas:

- The definition of giftedness in the district;
- Identification procedures (e.g., multiple measures, tests and scores, rubrics, checklists);
- Program and services (e.g., time allocations per grade level, access, assessment of student progress, curricula and materials, grouping and delivery);
- Program evaluation (e.g., value added test scores, parent and student surveys);
- Resources (e.g., staffing, facilities, funding, transportation);
- Professional development;
- Documentation on student records and reporting;
- Supervision and coordination of gifted programs (e.g., budget, supplies, teacher observations)
- Parent notification and education; and
- Articulation between elementary and secondary schools, sending and receiving districts, and institutions of higher education and secondary schools.

Local district policies and procedures must be reviewed and revised as the district's population and goals change and in accordance with any changes made to New Jersey Administrative Code by the State Board of education and the NJDOE.

The Commission further recommends that the above information be made available to NJDOE staff on demand and during the seven-year monitoring process.

Recommendation 5.1: Identification Using NAGC Standards

The Commission recommends that school districts employ the guiding identification principles outlined by the National Association for Gifted Children in its *PreK-12 Gifted Program Standards* (see Appendix C). School district identification programs should:

- Assess talent broadly;
- Acknowledge that there is a range of giftedness and a range of associated services;
- Use different strategies to identify different aspects of giftedness;
- Use appropriate measurements for underrepresented populations;
- Use instruments that are valid and reliable for the construct of giftedness being assessed;
- Use multiple measures and multiple criteria;
- Use an individual case study approach to identify students;
- Identify and place students according to needs and ability; and
- Provide for all identified students not just a set number of students that can be served.

Recommendation 5.2: Identification: Nominations

The Commission recommends that a comprehensive and cohesive process for student nomination must be in place. Nominations should originate from multiple sources and should be made available in all languages spoken in the school/community. The Commission recognizes the burden this might place on diverse school districts; therefore, the State should develop standardized notification materials in multiple languages that districts can use to notify parents. This is important to maximize outreach to underrepresented populations. Local school districts should make every effort to educate parents about the characteristics of giftedness. Information about the nomination process should be communicated to parents annually, with reasonable deadlines for submission and contact information for help and guidance. Nomination and screening must be ongoing. This means that the process may be initiated at any time during the school year. This also ensures that new students entering the school have opportunities to seek entrance into the program during the same academic year as they enter.

Recommendation 5.3: Identification: Measure Multiple Abilities and Talents

The Commission recommends that instruments used to identify students as eligible for gifted programs and services measure diverse abilities, talents, strengths, and needs. The department should consider developing a list of appropriate assessments and processes and post them with information on associated validity, reliability, and research data on the NJDOE Website.

Recommendation 5.4: Identification: Instruments: Multiple Measures

State and local policies should align with the NAGC position paper *Using Tests to Identify Gifted Students*, and include the following important points:

- Standardized achievement, intelligence, and creativity tests, when used properly and selected with care, are valuable parts of the identification and screening process for gifted programs and services.
- The first step to identification is a screening process that considers all children. Subsequent identification processes are administered to students who have been noted as potentially gifted as part of the general screening process.
- Despite their potential usefulness, tests have limitations. This is especially important when assessing underserved gifted students (e.g., young children, linguistically or culturally diverse students, economically disadvantaged students, students with special needs).
- No single measure should be used to make identification and placement decisions.
- Multiple measures and valid indicators from multiple sources must be used (e.g., information from family and caregivers, teachers and/or student observations; portfolios; products; interviews). Identification processes must be multidimensional and multileveled.
- Personnel who administer, use, or advise others in the use of these tests should be qualified to do so.

Recommendation 5.5: Identification: Sensitivity

The Commission recommends that students be assessed using a tool that is culturally and gender sensitive. Assessments should be free of bias and provide students of all

backgrounds with equal access to appropriate opportunities. Students should be assessed in their native language, if applicable, or in the language in which they are most fluent. Accommodations should be made for students with disabilities in accordance with their IEP.

Recommendation 5.6: Identification: Student Profile

The Commission recommends that an assessment of individual strengths and needs be developed to plan appropriate intervention. Services should be related to the assessment and the plan should reflect the student's needs, learning styles, and interests.

Recommendation 5.7: Identification: Current Research

The Commission recommends that identification procedures and instruments be based on evidence-based practices and current research. Instruments should represent an appropriate balance of reliable and valid quantitative and qualitative measures.

Recommendation 5.8: Identification: Policies and Procedures

The Commission recommends that written policies and procedures include provisions for informed consent, continued participation in the gifted program, student reassessment, and student exit from the program. An appeals process should be in place, thus ensuring that gifted learners receive due process.

Recommendation 6.1: Programs and Services

The Commission recommends that district boards of education be required to provide a continuum of programs and services designed to meet the needs of students in the local community. The Commission acknowledges that programs and services are often designed based on available funding and not on the needs of students. Using existing funding sources, schools should consider the full continuum of programs and services including whole school programs, in-class accommodations, out-of-class programs, and out-of-school programs before choosing what works best to serve the students in their community. This includes, but is not limited to, the following: enrichment in the classroom; resource room or pullout classes; cluster grouping; special interest classes; community mentor programs; independent study; specialized classes or schools; magnet schools; summer programs; acceleration; curriculum compacting; multi-aged grouping; advanced placement; early college entrance; and dual enrollment in high school and college.

Effective programs for gifted students include the following elements:

6.1a Instructional programming must match the identified needs of the student and the curriculum must respect the needs of the gifted learner. The academic, social, emotional, and physical needs of the student must be considered.

6.1b Programming prototypes must be flexible in order to respond to the varying needs, abilities, and interests of students. Students should be allowed to progress at an individualized pace. A written instructional plan should guide student instruction and progress.

6.1c. Students should spend part of each day in groups with similarly gifted students.

6.1d. Twice-exceptional students must be provided with programs and services that accommodate for giftedness as well as their disabilities.

6.1e. Minority students, limited English proficient students, and students from low-income families need additional support once they are identified as gifted. The department should provide additional support to districts to maximize educational opportunities for these students.

6.1f. School programs must address the socio-emotional needs of gifted learners. Schools must be prepared to address issues, including, but not limited to, perfectionism, ridicule by peers, bullying, worry and a sense of helplessness, uneven development, intensity, and stress and burnout. Educational services personnel (e.g., counselors, nurses) may need specialized training to address the full range of these issues with gifted students.

6.1g. Gifted and talented students may require assistance with life decisions as well as with the exploration of unique academic and career paths. School counselors are an integral part of the school's gifted program.

6.1h. Performance-based and authentic assessment should be used to assess student achievement. Gifted learners must be challenged to use higher order thinking skills.

Recommendation 6.2: Program and Curriculum Review

The Commission recommends that district gifted and talented programs be included in the five-year curriculum review cycle. The Commission recommends that opportunities for gifted and talented students be incorporated into all core curriculum content areas and that the Department of Education monitor curriculum development as part of the regular school evaluation process.

Recommendation 7.1: Highly Qualified Teachers

The Commission recommends that the department develop policies and regulations that will ensure that "highly qualified" teachers instruct gifted and talented students. Teachers of gifted and talented students should be required to provide evidence of continuing education and experiences in gifted education that align with the New Jersey HOUSE Matrix.

Recommendation 7.2: Gifted Education Endorsement

The Commission recommends that a gifted education endorsement be made available for those teachers who desire additional validation of post-certification work in the field. Candidates for the endorsement would apply after completing a prescribed series of 15 college credits. Coursework should address:

- Social and emotional needs of gifted and talented students
- Content-specific methods of teaching gifted and talented students
- Differentiated instruction and program design
- Identification processes and testing
- Resources and technology in gifted education
- Practical experience teaching gifted and talented students (may be waived for experienced gifted and talented teachers)

Teachers would not be required to obtain this endorsement; however, this would provide district boards of education with a pool of candidates that have completed additional and more advanced work in the specialization.

Recommendation 7.3: Role of Higher Education
The Commission recommends that New Jersey's colleges and universities be required to provide courses in gifted and talented pedagogy at the undergraduate and graduate level. New Jersey teachers should not have to leave the state for high-quality professional development or advanced degrees in gifted and talented education.

Recommendation 7.4: Preparation of School Leaders
The Commission recommends that school administrators with responsibility for gifted programs be encouraged to attend professional development programs that focus on high quality gifted and talented programs. In addition, supervisors or coordinators of gifted programs should be "highly qualified" in the field.

Recommendation 7.5: Sustained, High-Quality Professional Development
The Commission recommends that the department require district boards of education to develop a comprehensive staff development plan that includes specialized programs on the needs of gifted learners for all teachers. Such experiences should be grounded in the Professional Standards for Teachers and School Leaders (N.J.A.C. 6A:9-3). High-quality professional development should focus on improving teachers' ability to design instruction appropriate to a student's developmental stage, learning styles, strengths, and needs. Professional development should focus on the needs of gifted learners and the full range of programs and services designed to meet those needs (e.g. twice exceptional students, profoundly gifted, artistically talented).

Recommendation 7.6: Professional Development for Educational Services Personnel
The Commission recommends that educational services personnel be required to participate in professional development activities that focus on the needs of gifted students, including twice-exceptional students.

Recommendation 8.1: Funding: Categorical Aid
The Commission recommends that the New Jersey Legislature appropriate recurring categorical state aid to support gifted and talented programs. These funds would be analogous to other forms of categorical funding for special education, bilingual education, early childhood programs, and demonstrably effective programs. The Commission acknowledges that the Legislature should consider a cost analysis and further acknowledges the difficulty of providing funding without a standardized state definition of giftedness. These issues should be considered as part of the discussion about federal and state funding of gifted education.

Recommendation 8.2: Funding: Per Pupil Allocation
The Commission recommends that the Legislature establish an annual per pupil allocation, based on the number of students identified in a program that meets the minimum standards as outlined by the NAGC. As noted in recommendation 8.1, this

may require intensive study by the Legislature and significant policy changes to ensure equitable distribution of funds.

Recommendation 8.3: Funding: Department of Education Programs and Staff

The Commission recommends that the New Jersey Legislature provide funds to the Department of Education to support staff and programs for gifted education. Furthermore, the Commission strongly recommends that the Legislature provide funds to support regular data collection and analysis as a primary activity of the staff.

Recommendation 8.4: Funding: Advisory Committee

The Commission recommends that the Legislature provide funds to support the establishment of a permanent advisory committee to monitor gifted education and to inform the Legislature on a regular basis.

Recommendation 9.1: Data Collection and Evaluation

The Commission recommends that the department routinely collect programmatic data on gifted programs. Local school districts should be required to annually report the number of students identified and participating in gifted programs. The department should initiate an extensive survey to establish baseline data during the 2004-05 school year. After that, the gifted and talented survey should be implemented eighteen months prior to the sunset of N.J.A.C. 6A:8, Standards and Assessment. The survey should assess the intended and unintended consequences of state regulations and local policies. Both qualitative and quantitative analysis should be employed to determine the extent, quality and effectiveness of program implementation, including information on program outcomes and effectiveness. The results of the data collection and analysis should be developed into a report that is reviewed by the State Board of Education, the Commissioner of Education, and the Governor and Legislature, as appropriate, and made available to the general public. The report should be used to address policy and funding needs at both the state and local levels.

Summary

The Commission was charged with examining existing practices and making recommendations on effective and efficient programs and practices in gifted education. The Commission developed nine categories of recommendations, based on extensive experience and study of the field. One important consideration is the very nature of New Jersey's educational system—a system of more than 600 district boards of education along with approximately 55 charter schools. Each local school district, under the concept of "local control", establishes policies and procedures to provide students with a "thorough and efficient" education as guaranteed by the State Constitution. As a result, many educational mandates have been explicitly developed to allow for this flexibility. At the same time, an increase in student mobility makes it clear that state policies must provide for equity and access to programs in every school district. **Very few of these recommendations can be achieved without a significant commitment to funding, staff, and professional development.**

Taking this into consideration, the Commission decided not to recommend a specific gifted education program but to address the broader issues of identification using multiple measures, highly qualified teachers, and funding. The Commission firmly believes that all students are deserving of a quality education that recognizes and addresses their talents and abilities and maximizes their potential. To this end, the Commission hopes that the Commissioner of Education, the State Board of Education, the State Legislature, and the Governor will seriously consider these recommendations and initiate an ongoing dialogue with Commission members about these important issues.

APPENDIX A: GLOSSARY

Acceleration: Students move to a higher level of class work, skip a class, or skip one or more entire grades.

Advanced Placement: AP classes are college-level courses taught in high schools by trained high school teachers. These classes provide challenge and possible college credit.

Best Practices: Recognition program sponsored by the New Jersey Department of Education.

Cluster Grouping: Organizing students of like abilities and/or interests in small groups within a classroom. to facilitate differentiated instruction.

Community Mentor Program: Gifted students interact on an individual basis with selected members of the community for an extended time period on a topic of special interest to the student.

Consultant-Teacher Program: The classroom teacher provides differentiated instruction within the classroom with the assistance of a specially trained consultant teacher who provides extra materials and teaches small groups of children in the regular classroom.

Curriculum Compacting: This is a procedure used to streamline the regular curriculum for students who are capable of mastering it at a faster pace. It involves assessing students' knowledge, skills, and previous mastery, teaching any missing elements of the concepts assessed, and then substituting more challenging options.

Differentiated Instruction: In this type of instruction**,** teachers adapt instruction to meet student differences. Instruction may be modified to meet students' varying readiness levels, experiences, learning preferences, and interests.

Dual Enrollment: Students take college courses while they are still enrolled in high school. This is sometimes available in special summer programs.

Early College Entrance: Students enter college early, usually at end of the junior year, supported by high grades and ACT/SAT scores.

Enrichment in the Classroom: The classroom teacher provides a differentiated program of study without assistance from an outside resource or consultant.

HQT (Highly Qualified Teacher): The New Jersey model for identifying highly qualified teachers as required by NCLB can be found at **www.nj.gov/njded/profdev/nclb.**

Independent Study Program: A qualified teacher or mentor supervises independent study projects.

Interest Classes: Students volunteer for challenging classes on topics beyond or outside the regular curriculum.

Jacob K. Javits Gifted and Talented Students Education Program: Federal program that provides funds to support national research centers and specialized projects that meet the specialized needs of gifted and talented students.

Magnet School: A school is established that focuses on a specific area. Students with interests in particular areas are encouraged to volunteer for these programs even if they are outside the students' own neighborhood school.

Multiple Measures: Using more than one way to measure a student's achievement and ability, such as using an interview, a portfolio of a student's work, and his/her achievement test scores to screen for entrance into a gifted education program.

NAGC: National Association for Gifted Children

National Research Center on the Gifted and Talented: This is a collaboration of three universities (the University of Virginia, the University of Connecticut, and Yale University), collaborating school districts, 20 senior scholars, and 52 state and territorial education departments to promote and support high-quality, research-based programs for gifted and talented students.

NCLB: No Child Left Behind Act of 2001

NJQSAC: New Jersey Quality Single Accountability Continuum

PTSB: The Professional Teaching Standards Board provides oversight for the state's initiative that requires 100 clock hours of professional development over five years.

Resource Room/Pull-Out: Gifted students leave the classroom on a regular basis for differentiated instruction provided by a specially trained teacher.

Special Class: Gifted students are grouped together for most of the day and receive instruction from a specially trained teacher.

Special School: Gifted students receive differentiated instruction in a specialized school established for that purpose.

Summer Programs: Enrichment or accelerated summer programs provide gifted students with specialized or general studies during the summer.

Tracking: This means that a student is “locked-in” to a level of difficulty or performance for all subject areas and that he/she cannot advance from that level. Certain opportunities may be limited for students in that “track”.

APPENDIX B: CURRICULUM MODELS

Many curriculum models are available to assist educators in developing a differentiated curriculum for gifted and talented students. A curriculum model should have a framework for curriculum design and development, should be transferable and usable in all content areas, should have K-12 applicability, and should be applicable across multiple locations and learning settings.

The *Integrative Education Model* (Clark, 1986) focuses on the fully functioning mind of the individual and seeks to help students use all their abilities in their attempts at learning. To do so, the model combines the use of students' thinking, feeling, sensing, and intuiting skills and brings them to bear on the academic and nonacademic areas of schooling. The strength of this model is its integrated approach to learning. It recognizes students as fully functioning human beings who have interacting systems that influence performance. This view is very pragmatic in that it is certainly a recognized fact that the way a student feels will influence the way she or he thinks; the opposite is also true. Clark extends this reality into a model for building curriculum that is humane in its approach to learning and child-centered in its intent. One can picture the model as a circle divided into four quadrants representing the following functions: the thinking function (cognitive); the feeling or emotional function (affective); the physical function (sensing); and the intuitive function (insightful, creative). Clark (1986) describes the four quadrants in the following ways. The *cognitive function* "includes the analytic, problem solving, sequential, evaluative specialization of the left cortical hemisphere of the brain as well as the more spatially oriented, gestalt specialization of the right cortical hemisphere" (p. 27). The *affective function* "is expressed in emotions and feelings. . . (providing) the gateway to enhance or limit higher cognitive function" (p. 27). The *physical function* "involves movement, physical encoding, sight, hearing, smell, taste, and touch. . . (determining) how we perceive reality" (p. 28). And the *intuitive function* "is the sense of total understanding, of directly and immediately gaining a concept in its whole, living existence, and is in part the result of a high level of synthesis of all the brain functions" (p. 29).

The *CoRT Thinking Model,* designed by DeBono (1986), is a system through which thinking is directly taught as a skill. This direct teaching of thinking has gained great acceptance over the past five years and has been the basis for developing curriculum for the gifted even longer. It has been recognized by educators that the skills involved with thinking go beyond the memorization and recall of facts and that students need to develop this ability in order to use information in ways that will aid their cognitive and affective processes. *CaRT Thinking Lessons* have been developed in such a way that they can be used at all grade levels and with all students in the class. The *CoRT Thinking Model* is primarily a means to differentiate the *processes* of instruction. Students are taught ways to use their cognitive abilities fully and to problem solve. DeBono's purpose is to develop those abilities and to enhance creative thinking abilities at the same time. However, by learning the system and the ways of organizing thinking, the program also becomes a way to modify the *content* of instruction. The new strategies and ways to organize their thoughts give students new direction for developing their cognitive functions. The *CoRT*

Thinking Model can be integrated easily into the regular classroom structure. Students of high ability can work on complex problems as they learn the skill lesson for the week.

The *Model for Content Modification* (Gallagher, 1985) gives the teacher an inquiry method framework upon which differentiation can occur in a way that is compatible with the traits of gifted students. Gifted students are likely more able to use multiple means of problem solving and knowledge production and the use of inquiry methods can further enhance this ability. At the same time, it can introduce intrigue and mystery into learning as the seemingly unexplainable becomes explained. This model brings amusement into the classroom and lays a foundation for serious exploration of the unknown in innovative and creative ways.

Treffinger's *Model for Encouraging Creative Learning* (Treffinger, 1986) is a three-level configuration that begins with basic elements and progresses to more complex functions of creative thinking. As in the *Enrichment Triad Model* (Renzulli, 1977), the student is involved in skill-building activities in the first two levels which are brought to bear on real-life problems in the last. The model is composed of the following steps: *Basic Tools, Practice with Process,* and *Working with Real Problems.* Level I, *Basic Tools,* includes the skills of divergent thinking drawn from the work of Guilford (1967). Their development will allow students not only to be flexible and fluent in their thinking but also to be willing to express innovative thinking to others. *Practice with Process,* Level II, provides the students with a chance to apply the skills learned in Level I in practice situations.

The Stanley Model of Talent Identification and Development: This model's goal is to educate for individual development over the life-span. Major principles of the model include (1) the use of a secure and difficult testing instrument that taps into high-level verbal and mathematical reasoning to identify students; (2) a diagnostic testing-prescriptive instructional approach (DT-PI) in teaching gifted students through special classes, allowing for appropriate level challenge in instruction; (3) the use of subject matter acceleration and fast-paced classes in core academic areas, as well as advocacy for various other forms of acceleration; and (4) curriculum flexibility in all schooling. The research work of SMPY has been strong over the past 27 years, with more than 300 published articles, chapters, and books about the model. Findings of these studies have consistently focused on the benefits of acceleration for continued advanced work in an area by precocious students (Stanley, Keating, & Fox, 1974), a clear rationale for the use of acceleration in intellectual development (Keating, 1976). Findings also note the long-term positive repeated impacts of accelerative opportunities (Benbow & Arjmand, 1990).

The Renzulli Schoolwide Enrichment Triad Model (SEM): In the Schoolwide Enrichment Model (SEM) (Renzulli, 1988) a talent pool of 15-20% of above-average ability/high-potential students is identified through a variety of measures, including achievement tests, teacher nominations, assessment of potential for creativity and task commitment, as well as alternative pathways of entrance (self-nomination, parent nomination, etc.). High achievement test scores and IQ scores automatically include a student in the talent pool, enabling those students who are underachieving in their academic school

work to be considered. Identified students are then eligible for several kinds of services. First, interest and learning style assessments are used with talent pool students. Second, curriculum compacting is provided to all eligible students; that is, the regular curriculum is modified by eliminating portions of previously mastered content, and alternative work is substituted. Third, the Enrichment Triad Model offers three types of enrichment experiences: Type I, II, and III. Type III enrichment is usually most appropriate for students with higher levels of ability, interest, and task commitment. Type I Enrichment consists of general exploratory experiences such as guest speakers, field trips, demonstrations, interest centers, and the use of audiovisual materials designed to expose students to new and exciting topics, ideas, and fields of knowledge not ordinarily covered in the regular curriculum. Type II Enrichment includes instructional methods and materials purposefully designed to promote the development of thinking, feeling, research, communication, and methodological processes. Type III Enrichment, the most advanced level of the model, is defined as investigative activities and artistic productions in which the learner assumes the role of a first-hand inquirer: thinking, feeling, and acting like a practicing professional, with involvement pursued at a level as advanced or professional as possible. The SEM model is used widely in some form in schools nationally and internationally. Renzulli perceives that the model is closely linked to core curricula, offers a scope and sequence within Type II activities, and has the potential to be aligned with National Content Standards.

.

The Betts Autonomous Learner Model: This model for the gifted and talented was developed to meet the diverse cognitive, emotional, and social needs of gifted and talented students in grades K-12 (Betts & Knapp, 1980). As the needs of gifted and talented students are met, gifted students develop into autonomous learners who are responsible for the development, implementation, and evaluation of their own learning. The model is divided into five major dimensions: (1) orientation, (2) individual development, (3) enrichment activities, (4) seminars, and (5) in-depth study.

Research data on this model is lacking, however, it is one of the most widely recognized and used in the United States (Betts, 1986). Teachers have commented positively on its implementation. Its design suggests a three-year timeline for model implementation. It does contain a degree of comprehensiveness in that the model applies broadly to all curriculum domains and ages of learners; however, it does not incorporate any features of accelerated learning, thereby limiting one aspect of its comprehensiveness.

Gardner's Multiple Intelligences Model was built on a multidimensional concept of intelligence (Gardner, 1983). Seven areas of intelligence were defined in the original published work in 1983, with an eighth intelligence added by Gardner in his 1995 version. The intelligences are (1) verbal/linguistic, (2) logical/mathematical, (3) visual/spatial, (4) musical/rhythmic, (5) bodily/kinesthetic, (6) interpersonal, (7) intrapersonal, and (8) naturalistic. Longitudinal evidence of effectiveness with gifted students over at least three years has not been documented. The multiple intelligences approach has been used in the formation of new schools, in identifying individual differences, for curriculum planning and development, and as a way to assess instructional strategies. A plethora of curriculum materials has been produced and marketed based upon Multiple Intelligences (MI). This approach holds widespread appeal

for many educators because it can be adapted for any learner, subject domain, or grade level. While the model has been readily adapted to curricula, it remains primarily a conception of intelligence applied broadly to school settings as a way to promote talent development for all learners.

The Purdue Three-Stage Enrichment Model for Elementary Gifted Learners (PACE) and The Purdue Secondary Model for Gifted and Talented Youth: The concept of a three-stage model, initiated by Feldhusen and his graduate students, was first introduced as a course design for university students in 1973. It evolved into the Three-Stage Model by 1979. It is primarily an ordered enrichment model that moves students from simple thinking experiences to complex independent activities (Feldhusen & Kolloff, 1986). . Stage I focuses on the development of divergent and convergent thinking skills. Stage II provides development in creative problem solving. Stage III allows students to apply research skills in the development of independent study skills.

The *Purdue Secondary Model* is a comprehensive structure for programming services at the secondary level. It has 11 components supporting enrichment and acceleration options. The components are (1) counseling services, (2) seminars, (3) advanced placement courses, (4) honors classes, (5) math/science acceleration, (6) foreign languages, (7) arts, (8) cultural experiences, (9) career education, (10) vocational programs, and (11) extra-school instruction (Feldhusen & Robinson-Wyman, 1986). The application and implementation of either the elementary or secondary models are not conclusive, yet they appear to be sustainable. Neither model utilizes a scope and sequence. Neither may be viewed as a comprehensive model in terms of applying broadly to all areas of the curriculum, all types of gifted learners, or to all stages of development.

The Kaplan Grid: The Grid was a model designed to facilitate the curriculum developer's task of deciding what constitutes a differentiated curriculum and how one can construct such a curriculum. The model uses the components of process, content, and product organized around a theme. Content is defined as the relationship between economic, social, personal, and environmental displays of power, and the needs and the interests of individuals, groups, and societies (interdisciplinary) (Kaplan, 1986). The process component utilizes productive thinking, research skills, and basic skills. The product component culminates the learning into a mode of communication. Research evidence could not be found to support the effectiveness of this model with a target population. However, there has been extensive implementation of the approach at both state and local levels. The Grid is intended as a developmental framework for curriculum planning for gifted learners, but it does not contain a scope and sequence. Additionally, within the model itself, no provisions are explicitly made for accelerated learning.

The Maker Matrix, developed to categorize content, process, environmental, and product dimensions of an appropriate curriculum for the gifted, represents a set of descriptive criteria that may be used to develop classroom-based curricula (Maker, 1982). Recent work on the model represents primarily an enhancement of its problem-solving component. The Discover project is a process for assessing problem solving in multiple

intelligences. The problem solving matrix incorporates a continuum of five problem types for use within each of the intelligences. Type I and II problems require convergent thinking. Type III problems are structured but allow for a range of methods to solve them and have a range of acceptable answers. Type IV problems are defined, but the learner selects a method for solving and establishing evaluation criteria for the solution. Type V problems are ill-structured, and the learner must define the problem, discover the method for solving, and establish criteria for creating a solution (Maker, Nielson, & Rogers, 1994). School systems in several states have applied the matrix as a framework for organizing and developing classroom level curricula. There is evidence of an individual teacher-developed curriculum, and teachers have been receptive to its use. The sustainability of the matrix model for at least three years is not known. It is not comprehensive in nature, yet it does have a strong emphasis in its relationship to core subject domains.

The Meeker Structure of Intellect Model (Meeker, 1969) for gifted education was based upon a theory of human intelligence called the Structure of Intellect (SI) developed by J. P. Guilford (1967). The SI model of human intelligence describes 90 kinds of cognitive functions organized into content, operation, and product abilities. The SI system applies Guilford's theory into the areas of assessment and training. The model is definable as a system and applies broadly to all types of gifted learners at varying developmental stages; but due to its comprehensiveness and emphasis on cognition, only a few sites have implemented the model. SI has been successfully used in selected sites for identification with culturally diverse and disadvantaged students. Now somewhat dated, SI offered a means of understanding students by delineating profiles of their intellectual abilities.

The Parallel Curriculum Model (Tomlinson, 2002) was developed by a team of gifted education experts led by Carol Ann Tomlinson for the National Association for Gifted Children. This model proposes the possibility of developing appropriately challenging curriculum using one, two, three, or four “parallel” ways of thinking about course content. All curricula take basic definition and purpose from the core curriculum, the first parallel. A second parallel is called the curriculum of connections and expands on the core curriculum by guiding students to make connections within or across disciplines, across times, across cultures or places, or in some combination of those elements. A third parallel is the curriculum of practice which guides learners in understanding and applying the facts, concepts, principles, and methodologies of the discipline in ways that encourage student growth toward expertise in the discipline. The fourth parallel is the curriculum of identity. This parallel guides students in coming to understand their own strengths, preferences, values, and commitment by reflecting on their development through the lens of contributors and professional in a field of study.

The Schlichter Models for Talents Unlimited Inc. and Talents Unlimited to the Secondary Power (TU): Talents Unlimited was based upon Guilford's (1967) research on the nature of intelligence. Taylor, Ghiselin, Wolfer, Loy, & Bourne (1964), also influenced by Guilford, authored the *Multiple Talent Theory*, which precipitated the development of a model to be employed in helping teachers identify and nurture students' multiple talents. Talents Unlimited features four major components: a description of specific skill abilities

or talents, in addition to academic ability, that include productive thinking, communication, forecasting, decision making, and planning; model instructional materials; an in-service training program for teachers; and, an evaluation system for assessing students' thinking skills development (Schlichter, 1986). *Talents Unlimited Inc.* is the K-6 model, and *Talents Unlimited to the Secondary Power* is a model for grades 7-12. No longitudinal studies have been conducted on these models. Due to the strong emphasis on teacher training, Talents Unlimited has widespread applicable student use across the United States and worldwide. The model has been used most effectively as a classroom-based approach with all learners, thus rendering it less differentiated for the gifted in practice than some of the other models.

Sternberg's Triarchic Componential Model Sternberg's Componential Model is based upon an information processing theory of intelligence (Sternberg, 1981). In the model, three components represent the mental processes used in thinking. The executive process component is used in planning, decision-making, and monitoring performance. The performance component processes are used in executing the executive problem-solving strategies within domains. The knowledge-acquisition component is used in acquiring, retaining, and transferring new information. Research results suggest slightly stronger effects for triarchic instruction over traditional and critical-thinking approaches. Descriptions of teacher-created curricula and instructional instrumentation processes were limited but clearly are organized along discipline-specific lines of inquiry. Sustainability of the curriculum model beyond summer program implementation and pilot settings is not known. There is not a packaged teacher-training or staff-development component, partially because the model is based upon a theory of intelligence rather than a deliberate curriculum framework. It is a systemic but not a comprehensive model with some applications in selected classrooms.

Suchman's Inquiry Development Model (Suchman, 1975) is composed of a four-step process through which students develop and test hypotheses about how events, things, or phenomena interrelate. The four steps are: data collection, data organization, hypothesizing, and hypothesis testing. The teacher presents students with a dissonant event. Then they enter the four stages. During the final two stages the teacher does not answer the students' questions with yes or no responses. The Inquiry Development Model is suited for modifying the processes of the curriculum and the environment where learning takes place. This model can be used throughout the content areas of curriculum. It is appropriate for gifted students in that these students are able to use multiple means of problem solving and knowledge production, which are enhanced by inquiry methods. The model is also challenging for gifted students.

VanTassel-Baska Integrated Curriculum Model (ICM) (VanTassel-Baska, 1986) was specifically developed for high ability learners. It has three dimensions: (1) advanced content, (2) high-level process and product work, and (3) intra- and interdisciplinary concept development and understanding. VanTassel-Baska, with funding from the Jacob Javits Program, used the ICM to develop specific curriculum frameworks and underlying units in language arts and science. Research has been conducted to support the effectiveness of these curriculum units with gifted populations within a variety of

educational settings. Research has documented positive change in teacher attitude, student motivational response, and school and district change (VanTassel-Baska, Avery, Little & Hughes, 2000) as a result of using the ICM curriculum over three years. There is a strong relationship to core subject domains, as well as national standards alignment. The curriculum, based on the model, was developed using the national standards work as a template. Alignment charts have been completed for national and state standards work in both language arts and science. There is evidence of broad-based application, but some questions remain regarding the ease of implementation of actual teaching units and the fidelity of implementation by teachers (Burruss, 1997).

Williams' Model for Implementing Cognitive-Affective Behaviors in the Classroom (Williams, 1970) combines cognitive and affective skills in creativity development with the traditional content areas taught in school. The model is a three-dimensional representation of how curriculum, teaching strategies, and student behaviors interact to enhance thinking. One segment from each dimension is chosen and then combined with the segments from the other two dimensions in order to design activities for the students. These dimensions are curriculum, teacher behaviors, and pupil behaviors. The model deals primarily with the processes of learning; it does not form a comprehensive base for modifying curriculum for gifted and talented students. When used in conjunction with other models, it can make a significant contribution to infusing creative thinking throughout the curriculum.

Introduction

This document delineates both *requisite* and *exemplary* standards for gifted education programming, and depicts pre-collegiate gifted programming standards for gifted education, representing a range of minimal, or requisite, and exemplary, or visionary, levels of performance. These standards may serve as benchmarks for measuring programming effectiveness; criteria for program evaluation; guidelines for program development; and recommendations for minimal requirements for high-quality gifted education programming.

Several **organizing principles** guided the work of the task force, including:

- Standards should encourage but not dictate approaches of high quality.
- Standards represent both requisite program outcomes and standards for excellence.
- Standards establish the level of performance to which all educational school districts and agencies

should aspire.

- Standards represent professional consensus on critical practice in gifted education that most everyone is likely to find acceptable.
- Standards are observable aspects of educational programming and are directly connected to the continuous growth and development of gifted learners.

Definitions of some terms may be found on the back cover.

Definitions

Gifted education programming is a coordinated and comprehensive structure of informal and formal services provided on a continuing basis intended to effectively nurture gifted learners.

A standard is a designated level of performance that programming must achieve for the criteria to be deemed a success (Worthen, Sanders, & Fitzpatrick, 1997).

Gifted learners are "children and youth with outstanding talent who perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment" (U. S. Dept. of Education, 1993, p.3).

Minimum standards include requisite conditions for acceptable gifted education programming practice.

Exemplary standards designate desirable and visionary conditions for excellence in gifted education programming practice.

♦

Task Force Membership

Mary S. Landrum & Beverly Shaklee, Editors

Contributing Authors

Tim Burke, Gloria Cox, Jan DeWaard, Susan Hansford, Tom Hays, Marta Montjoy, Carol Reid, Anne Slanina

Other Task Force Members

Sally Beisser, Sally Dobyns, Coleen Ehreshmann, Michael Hall, Frank Rainey, Julia Roberts, Sue Vogel, Joanne Welch

References

U. S. Department of Education. (1993). *National excellence: A case for developing America's talent.* Washington, D. C.: Author.

Worthen, B. R., Sanders, J. R., & Fitzpatrick, J. L. (1997). *Program evaluation: Alternative approaches and practical guidelines* (second edition). New York: Longman.

Texas Education Agency. (1996*). Texas state plan for the education of gifted/talented students.* Austin, TX: Author.

Pre-K–Grade 12 Gifted Program Standards

© 1998 National Association for Gifted Children

1707 L St., NW, Suite 550, Washington, DC 20036
(202) 785-4268 ♦ www.nagc.org

Gifted Education Programming Criterion: Student Identification

Description: Gifted learners must be assessed to determine appropriate educational services.

Guiding Principles	Minimum Standards	Exemplary Standards
1. A comprehensive and cohesive process for student nomination must be coordinated in order to determine eligibility for gifted education services.	1.0M Information regarding the characteristics of gifted students in areas served by the district must be annually disseminated to all appropriate staff members. 1.1M All students must comprise the initial screening pool of potential recipients of gifted education services. 1.2M Nominations for services must be accepted from any source (e.g., teachers, parents, community members, peers, etc.). 1.3M Parents must be provided information regarding an understanding of giftedness and student characteristics.	1.0E The school district should provide information annually, in a variety of languages, regarding the process for nominating students for gifted education programming services. 1.1E The nomination process should be ongoing and screening of any student should occur at anytime. 1.2E Nomination procedures and forms should be available in a variety of languages. 1.3E Parents should be provided with special workshops or seminars to get a full meaning of giftedness.
2. Instruments used for student assessment to determine eligibility for gifted education services must measure diverse abilities, talents, strengths, and needs in order to provide students an opportunity to demonstrate any strengths.	2.0M Assessment instruments must measure the capabilities of students with provisions for the language in which the student is most fluent, when available. 2.1M Assessments must be culturally fair. 2.2M The purpose(s) of student assessments must be consistently articulated across all grade levels. 2.3M Student assessments must be sensitive to the current stage of talent development.	2.0E Assessments should be provided in a language in which the student is most fluent, if available. 2.1E Assessment should be responsive to students' economic conditions, gender, developmental differences, handicapping conditions, and other factors that mitigate against fair assessment practices. 2.2E Students identified in all designated areas of giftedness within a school district should be assessed consistently across grade levels. 2.3E Student assessments should be sensitive to all stages of talent development.
3. A student assessment profile of individual strengths and needs must be developed to plan appropriate intervention.	3.0M An assessment profile must be developed for each child to evaluate eligibility for gifted education programming services. 3.1M An assessment profile must reflect the unique learning characteristics and potential and performance levels.	3.0E Individual assessment plans should be developed for all gifted learners who need gifted education. 3.1E An assessment profile should reflect the gifted learner's interests, learning style, and educational needs.
4. All student identification procedures and instruments must be based on current theory and research.	4.0M No single assessment instrument or its results must deny student eligibility for gifted programming services. 4.1M All assessment instruments must provide evidence of reliability and validity for the intended purposes and target students.	4.0E Student assessment data should come from multiple sources and include multiple assessment methods. 4.1E Student assessment data should represent an appropriate balance of reliable and valid quantitative and qualitative measures.
5. Written procedures for student identification must include at the very least provisions for informed consent, student retention, student reassessment, student exiting, and appeals procedures.	5.0M District gifted programming guidelines must contain specific procedures for student assessment at least once during the elementary, middle, and secondary levels. 5.1M District guidelines must provide specific procedures for student retention and exiting, as well as guidelines for parent appeals.	5.0E Student placement data should be collected using an appropriate balance of quantitative and qualitative measures with adequate evidence of reliability and validity for the purposes of identification. 5.1E District guidelines and procedures should be reviewed and revised when necessary.

© 1998 National Association for Gifted Children, 1707 L St. NW, Suite 550, Washington, DC 20036 (202) 785-4268 www.nagc.org

Gifted Education Programming Criterion: Professional Development

Description: Gifted learners are entitled to be served by professionals who have specialized preparation in gifted education, expertise in appropriate differentiated content and instructional methods, involvement in ongoing professional development, and who possess exemplary personal and professional traits.

Guiding Principles	Minimum Standards	Exemplary Standards
1. A comprehensive staff development program must be provided for all school staff involved in the education of gifted learners.	1.0M All school staff must be made aware of the nature and needs of gifted students. 1.1M Teachers of gifted students must attend at least one professional development activity a year designed specifically for teaching gifted learners.	1.0E All school staff should be provided ongoing staff development in the nature and needs of gifted learners, and appropriate instructional strategies. 1.1E All teachers of gifted learners should continue to be actively engaged in the study of gifted education through staff development or graduate degree programs.
2. Only qualified personnel should be involved in the education of gifted learners.	2.0M All personnel working with gifted learners must be certified to teach in the area to which they are assigned, and must be aware of the unique learning differences and needs of gifted learners at the grade level at which they are teaching. 2.1M All specialist teachers in gifted education must hold or be actively working toward a certification (or the equivalent) in gifted education in the state in which they teach. 2.2M Any teacher whose primary responsibility for teaching includes gifted learners, must have extensive expertise in gifted education.	2.0E All personnel working with gifted learners should participate in regular staff development programs. 2.1E All specialist teachers in gifted education should possess a certification/specialization or degree in gifted education. 2.2E Only teachers with advanced expertise in gifted education should have primary responsibility for the education of gifted learners.
3. School personnel require support for their specific efforts related to the education of gifted learners.	3.0M School personnel must be released from their professional duties to participate in staff development efforts in gifted education.	3.0E Approved staff development activities in gifted education should be funded at least in part by school districts or educational agencies.
4. The educational staff must be provided with time and other support for the preparation and development of the differentiated education plans, materials, curriculum.	4.0M School personnel must be allotted planning time to prepare for the differentiated education of gifted learners.	4.0E Regularly scheduled planning time (e.g., release time, summer pay, etc.) should be allotted to teachers for the development of differentiated educational programs and related resources.

Table 6 of 7

© 1998 National Association for Gifted Children, 1707 L St. NW, Suite 550, Washington, DC 20036 (202) 785-4268 www.nagc.org

Gifted Education Programming Criterion: Socio-Emotional Guidance and Counseling

Description: Gifted education programming must establish a plan to recognize and nurture the unique socio-emotional development of gifted learners.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Gifted learners must be provided with differentiated guidance efforts to meet their unique socio-emotional development.	1.0M Gifted learners, because of their unique socio-emotional development, must be provided with guidance and counseling services by a counselor who is familiar with the characteristics and socio-emotional needs of gifted learners.	1.0E Counseling services should be provided by a counselor familiar with specific training in the characteristics and socio-emotional needs (i.e., underachievement, multipotentiality, etc.) of diverse gifted learners.
2. Gifted learners must be provided with career guidance services especially designed for their unique needs.	2.0M Gifted learners must be provided with career guidance consistent with their unique strengths.	2.0E Gifted learners should be provided with college and career guidance that is appropriately different and delivered earlier than typical programs.
3. Gifted at-risk students must be provided with guidance and counseling to help them reach their potential.	3.0M Gifted learners who are placed at-risk must have special attention, counseling, and support to help them realize their full potential.	3.0E Gifted learners who do not demonstrate satisfactory performance in regular and/or gifted education classes should be provided with specialized intervention services.
4. Gifted learners must be provided with affective curriculum in addition to differentiated guidance and counseling services.	4.0M Gifted learners must be provided with affective curriculum as part of differentiated curriculum and instructional services.	4.0E A well defined and implemented affective curriculum scope and sequence containing personal/social awareness and adjustment, academic planning, and vocational and career awareness should be provided to gifted learners.
5. Underachieving gifted learners must be served rather than omitted from differentiated services.	5.0M Gifted students who are underachieving must not be exited from gifted programs because of related problems.	5.0E Underachieving gifted learners should be provided with specific guidance and counseling services that address the issues and problems related to underachievement.

© 1998 National Association for Gifted Children, 1707 L St. NW, Suite 550, Washington, DC 20036 (202) 785-4268 www.nagc.org

Gifted Education Programming Criterion: Program Evaluation

Description: Program evaluation is the systematic study of the value and impact of services provided.		
Guiding Principles	Minimum Standards	Exemplary Standards
1. An evaluation must be purposeful.	1.0M Information collected must reflect the interests and needs of most of the constituency groups.	1.0E Information collected should address pertinent questions raised by all constituency groups, and should be responsive to the needs of all stakeholders.
2. An evaluation must be efficient and economic.	2.0M School districts must provide sufficient resources for program evaluation.	2.0E School districts should allocate adequate time, financial support, and personnel to conduct systematic program evaluation.
3. An evaluation must be conducted competently and ethically.	3.0M Persons conducting the evaluation must be competent trustworthy. 3.1M The program evaluation design must address whether or not services have reached intended goals. 3.2M Instruments and procedures used for data collection must be valid and reliable for their intended use. 3.3M Ongoing formative and summative evaluation strategies must be used for substantive program improvement and development. 3.4M Individual data must be held confidential.	3.0E Persons conducting the evaluation should possess an expertise in program evaluation in gifted education. 3.1E The evaluation design should report the strengths and weaknesses found in the program as well as critical issues that might influence program services. 3.2E Care should be taken to ensure that instruments with sufficient evidence of reliability and validity are used, and that they are appropriate for varying age, developmental levels, gender, and diversity of the target population. 3.3E Formative evaluations should be conducted regularly with summative evaluations occurring minimally every five years or more often as specified by state or local district policies. 3.4E All individuals who are involved in the evaluation process should be given the opportunity to verify information and the resulting interpretation.
4. The evaluation results must be made available through a written report.	4.0M Evaluation reports must present the evaluation results in a clear and cohesive format.	4.0E Evaluation reports should be designed to present results and encourage follow-through by stakeholders.

© 1998 National Association for Gifted Children, 1707 L St. NW, Suite 550, Washington, DC 20036 (202) 785-4268 www.nagc.org

Gifted Education Programming Criterion: Program Design

Description: The development of appropriate gifted education programming requires comprehensive services based on sound philosophical, theoretical, and empirical support.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Rather than any single gifted program, a continuum of programming services must exist for gifted learners.	1.0M Gifted programming services must be accessible to all gifted learners.	1.0E Levels of services should be matched to the needs of gifted learners through the provision of a full continuum of options.
2. Gifted education must be adequately funded.	2.0M Gifted education funding should be equitable compared to the funding of other local programming.	2.0E Gifted education programming must receive funding consistent with the program goals and sufficient to adequately meet them.
3. Gifted education programming must evolve from a comprehensive and sound base.	3.0M Gifted education programming must be submitted for outside review on a regular basis. 3.1M Gifted programming must be guided by a clearly articulated philosophy statement and accompanying goals and objectives. 3.2M A continuum of services must be provided across grades pre-K–12.	3.0E Gifted education programming should be planned as a result of consultation with informed experts. 3.1E The school or school district should have a mission/ philosophy statement that addresses the need for gifted education programming. 3.2E A comprehensive pre-K–12 program plan should include policies and procedures for identification, curriculum and instruction, service delivery, teacher preparation, formative and summative evaluation, support services, and parent involvement.
4. Gifted education programming services must be an integral part of the general education school day.	4.0M Gifted education programming should be articulated with the general education program. 4.1M Appropriate educational opportunities must be provided in the regular classroom, resource classroom, separate, or optional voluntary environments.	4.0E Gifted services must be designed to supplement and build on the basic academic skills and knowledge learned in regular classrooms at all grade levels to ensure continuity as students progress through the program. 4.1E Local school districts should offer multiple service delivery options as no single service should stand alone.
5. Flexible groupings of students must be developed in order to facilitate differentiated instruction and curriculum.	5.0M The use of flexible grouping of gifted learners must be an integral part of gifted education programming.	5.0E Gifted learners should be included in flexible grouping arrangements in all content areas and grade levels that ensures that gifted students learn with and from intellectual peers.
6. Policies specific to adapting and adding to the nature and operations of the general education program are necessary for gifted education.	6.0M Existing and future school policies must include provisions for the needs of gifted learners.	6.0E Gifted education policies should exist for at least the following areas: early entrance, grade skipping, ability grouping, and dual enrollment.

© 1998 National Association for Gifted Children, 1707 L St. NW, Suite 550, Washington, DC 20036 (202) 785-4268 www.nagc.org

Gifted Education Programming Criterion: Program Administration and Management

Description: Appropriate gifted education programming must include the establishment of a systematic means of developing, implementing, and managing services.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Appropriately qualified personnel must direct services for the education of gifted learners.	1.0M The designated coordinator of gifted education programming must have completed coursework or staff development in gifted education and display leadership ability to be deemed appropriately qualified.	1.0E The designated gifted programming coordinator must have completed a certification program or advanced degree program in gifted education.
2. Gifted education programming must be integrated into the general education program.	2.0M The gifted education program must create linkages between general education and gifted education at all levels.	2.0E Responsibility for the education of gifted learners is a shared one requiring strong relationships between the gifted education program and general education schoolwide.
3. Gifted education programming must include positive working relationships with constituency and advocacy groups, as well as compliance agencies.	3.0M Gifted programming staff must establish on-going parent communication. 3.1M Gifted programs must establish and use an advisory committee that reflects the cultural and socio-economic diversity of the school or school district's total student population, and includes parents, community members, students, and school staff members. 3.2M Gifted education programming staff must communicate with other on-site departments as well as other educational agencies vested in the education of gifted learners (e.g., other school districts, school board members, state departments of education, intermediate educational agencies, etc.).	3.0E The gifted education programming staff should facilitate the dissemination of information regarding major policies and practices in gifted education (e.g., student referral and screening, appeals, informed consent, student progress, etc.). to colleagues, parents, community members, etc. 3.1E Parents of gifted learners should have regular opportunities to share input and make recommendations about program operations with the gifted programming coordinator. 3.2E The gifted education program should consider current issues and concerns from other educational fields and agencies regarding gifted programming decision making on a regular basis.
4. Requisite resources and materials must be provided to support the efforts of gifted education programming.	4.0M Resources must be provided to support program operations. 4.1M Technological support must be provided for gifted education programming services. 4.2M The library selections must reflect a range of materials including those appropriate for gifted learners.	4.0E A diversity of resources (e.g., parent, community, vocational, etc.) should be available to support program operations. 4.1E Gifted education programming should provide state-of-the-art technology to support appropriate services. 4.2E The acquisition plan for purchasing new materials for the school should reflect the needs of gifted learners.

Table 2 of 7

© 1998 National Association for Gifted Children, 1707 L St. NW, Suite 550, Washington, DC 20036 (202) 785-4268 www.nagc.org

Gifted Education Programming Criterion: Curriculum and Instruction

Description: Gifted education services must include curricular and instructional opportunities directed to the unique needs of the gifted child.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Differentiated curriculum for the gifted learner must span grades pre-K–12.	1.0M Differentiated curriculum (curricular and instructional adaptations that address the unique learning needs of gifted learners) for gifted learners must be integrated and articulated throughout the district.	1.0E A well-defined and implemented curriculum scope and sequence should be articulated for all grade levels and all subject areas.
2. Regular classroom curricula and instruction must be adapted, modified, or replaced to meet the unique needs of gifted learners.	2.0M Instruction, objectives, and strategies provided to gifted learners must be systematically differentiated from those in the regular classroom. 2.1M Teachers must differentiate, replace, supplement, or modify curricula to facilitate higher level learning goals. 2.2M Means for demonstrating proficiency in essential regular curriculum concepts and processes must be established to facilitate appropriate academic acceleration. 2.3M Gifted learners must be assessed for proficiency in basic skills and knowledge and provided with alternative challenging educational opportunities when proficiency is demonstrated	2.0E District curriculum plans should include objectives, content, and resources that challenge gifted learners in the regular classroom. 2.1E Teachers should be responsible for developing plans to differentiate the curriculum in every discipline for gifted learners. 2.2E Documentation of instruction for assessing level(s) of learning and accelerated rates of learning should demonstrate plans for gifted learners based on specific needs of individual learners. 2.3E Gifted learners should be assessed for proficiency in all standard courses of study and subsequently provided with more challenging educational opportunities.
3. Instructional pace must be flexible to allow for the accelerated learning of gifted learners as appropriate.	3.0M A program of instruction must consist of advanced content and appropriately differentiated teaching strategies to reflect the accelerative learning pace and advanced intellectual processes of gifted learners.	3.0E When warranted, continual opportunities for curricular acceleration should be provided in gifted learners' areas of strength and interest while allowing sufficient ceiling for optimal learning.
4. Educational opportunities for subject and grade skipping must be provided to gifted learners.	4.0M Decisions to proceed or limit the acceleration of content and grade acceleration must only be considered after a thorough assessment.	4.0E Possibilities for partial or full acceleration of content and grade levels should be available to any student presenting such needs.
5. Learning opportunities for gifted learners must consist of continuum of differentiated curricular options, instructional approaches, and resource materials.	5.0M Diverse and appropriate learning experiences must consist of a variety of curricular options, instructional strategies, and materials. 5.1M Flexible instructional arrangements (e.g., special classes, seminars, resource rooms, mentorships, independent study, and research projects) must be available.	5.0E Appropriate service options for each student to work at assessed level(s) and advanced rates of learning should be available. 5.1E Differentiated educational program curricula for students pre-K–12 should be modified to provide learning experiences matched to students' interests, readiness, and learning style.

© 1998 National Association for Gifted Children, 1707 L St. NW, Suite 550, Washington, DC 20036 (202) 785-4268 www.nagc.org

REFERENCES

Benbow, C. P., & Arjmand, O. (1990). Predictors of high academic achievement in mathematics and science by mathematically talented students: A longitudinal study. *Journal of Educational Psychology, 82,* 430-431.

Betts, G.T. (1986). The autonomous learner model for the gifted and talented. In J.S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented (*pp. 27-56). Mansfield Center, CT: Creative Learning Press.

Betts, G. T., & Knapp, J. (1980). Autonomous learning and the gifted: A secondary model. In A. Arnold (Ed.), *Secondary programs for the gifted* (pp. 29-36). Ventura, CA: Ventura Superintendent of Schools Office.

Borland, J. H. (2003). *Rethinking gifted education.* New York, NY: Teachers College Press.

Bradley, Debra, Esq. (August 2004). Email correspondence. NJPSA.

Burruss, J. D. (1997, April). *Walking the talk: Implementation decisions made by teachers.* Chicago: American Educational Research Association (AERA).

Callahan, C., Tomlinson, C.A., & Pizzat, P. (1994). *Contexts for promise: noteworthy practices and innovations in the identification of gifted students.* Charlottesville, VA: University of Virginia.

Clark, B. (1986) *Optimizing learning: The integrative education model in the classroom.* Columbus, OH: Merrill Publishing Co.

DeBono, E. (1986). *CoRT thinking teacher's notes.* New York: Pergamon Press.

Delisle, J. & Lewis, B. A. (2003). *The survival guide for teachers of gifted kids*. Minneapolis, MN: Free Spirit Publishing.

Donovan, M. & Cross, C. (2002). *Minority students in special and gifted education*. Washington, DC: National Research Council.

Edmonds, J. P. Ed.D. (November 2004). Email correspondence.

Ehrich, S. (2001). *Rationale for funding gifted education*. Edina, MN: Minnesota Council for the Gifted and Talented.

Feldhusen, J.F., & Kolloff, M.B. (1986). The Purdue Three-Stage Model for Gifted Education. In J.S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented (*pp. 126-152). Mansfield Center, CT: Creative Learning Press.

Feldhusen, J.F. & Robinson-Wyman, A. (1986). The Purdue Secondary Model for Gifted Education. In J.S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented (*pp. 153-179). Mansfield Center, CT: Creative Learning Press.

Gallagher, J. (1985). *Teaching the gifted child* (3rd ed.). Boston: Allyn and Bacon.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Guilford, J. (1967). *The nature of human intelligence.* New York: McGraw-Hill Book Co.

Heacox, D. (2002). *Differentiating instruction in the regular classroom.* Minneapolis, MN: Free Spirit Publishing.

Kaplan, S. (1986). The Kaplan grid. In J.S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented (*pp. 153-179). Mansfield Center, CT: Creative Learning Press.

Kaplan, S., Kaplan, J., Madsen, S., & Taylor, B. (1973). *Change for children*. Pacific Palisades, CA: Goodyear Publishing Company.

Karnes, F. A. & Bean, S. M. (Eds.). (2001). *Methods and materials for teaching the gifted.* Waco, TX: Prufrock Press.

Keating, D. P. (Ed.). (1976). *Intellectual talent: Research and development.* Baltimore: Johns Hopkins University Press.

Kulik, J. (1993). Meta analytic findings on grouping programs. *Gifted Child Quarterly, 36,* 73-77.

Landrum, M.S., Callahan, C.M., & Shaklee, B.D. (Eds.) (2001). *Aiming for excellence: Annotations of the NAGC pre-k-grade 12 gifted program standards.* Washington, DC: The National Association for Gifted Children.

Lipman, M., Sharp, A. & Oscanyan, F. (1984). *Philosophical inquiry.* New York: University Press of America.

Maker, C. J. (1982). *Curriculum development for the gifted*. Rockville, MD: Aspen.

Meeker, M. (1969). *The structure of the intellect: Its interpretation and uses*. Columbus, OH: Merrill.

National Association for Gifted Students. (1998). *Pre-K-Grade 12 Gifted Program Standards.* Washington, DC: Author.

New Jersey Department of Education. (1978). *Guidelines for gifted and talented educational programs.* Trenton, NJ: Author.

New Jersey Department of Education. (1987). *Gifted education: a state plan for NewJersey.* Trenton, NJ: Author

New Jersey Department of Education. (1987). *Guides in gifted education*. Trenton, NJ: Author.

New Jersey Department of Education. (1993). *White paper on gifted education*. Trenton, NJ: Author.

Parke, B. (1989). *Gifted students in regular classrooms*. Boston, MA: Allyn & Bacon.

Reis, S., Burns, D.E., & Renzulli, J.S. (1992). *Curriculum compacting: the complete guide to modifying the regular classroom for high ability students*. Mansfield Center, CT: Creative Learning Press, Inc.

Renzulli, J. (Ed.). (1988). *Technical report of research studies related to the revolving door identification model.* Storrs, CT: Bureau of Educational Research, The University of Connecticut.

Renzulli, J. (1977). *The enrichment triad model: A guide for developing defensible programs for the gifted and talented.* Mansfield Center, CT: Creative Learning Press.

Renzulli, J., & Reis, S. M. (1997). The schoolwide enrichment model: New directions for developing high-end learning. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (2nd ed., pp. 136-154). Boston: Allyn and Bacon.

Renzulli, J., Reis, S., & Smith, L. (1981). *The revolving door identification model*. Mansfield Center, CN: Creative Learning Press.

Renzulli, J., & Smith, L. (1979). *A guidebook for developing individualized educational programs for gifted and talented students.* Mansfield Center, CN: Creative Learning Press.

Robinson, L. (2002). *State funding of gifted and talented programs*. Washington, DC: National Education Association.

Schlichter, C. (1986). Talents unlimited: Applying the multiple talent approach in mainstream and gifted programs. In J.S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented (*pp. 352-390). Mansfield Center, CT: Creative Learning Press.

Stanley, J. C., Keating, D., & Fox, L. (1974). *Mathematical talent.* Baltimore: Johns Hopkins University Press.

Sternberg, (1981). A componential theory of intellectual giftedness. *Gifted Child Quarterly, 25,* (86-93).

Suchman, J. (1975). A model for the analysis of inquiry. In W. Barbe and J. Renzuli (Eds.), *Psychology and education of the gifted* (2nd ed.). New York: Irvington Publishers.

Swanson, M. (2002). *National survey on the state governance of K-12 gifted and talented education: summary report.* Tennessee Initiative for Gifted Education Reform.

Taylor, C.W., Ghiselin, B., Wolfer, J., Loy, L., & Bourne, L.E., Jr. (1964). *Development of a theory of education from psychology and other basic research findings.* Final Report, USOE Cooperative Research Project, N. 621. Salt Lake City, UT: University of Utah.

Tennessee State Board of Education. (2004). *Intellectually gifted students joint study committee report*. Author.

Texas Association for the Gifted and Talented. (Summer 2004). *Secondary options for gifted,* XXIV, 3. Austin TX: Author.

Tomlinson, C.A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA; ASCD.

Tomlinson, C.A. et al. (2002). *The parallel curriculum model*. Thousand Oaks, CA: Corwin Press.

Treffinger, D. (1986). *Thinking skills and problem solving.* Honeoye, NY: Center for Creative Learning.

United States Department of Education. (1993). *National excellence: a case for developing America's talent.* Washington, DC: Author.

VanTassel-Baska, J. (1986). Effective curriculum and instruction models for talented students. *Gifted Child Quarterly, 30,* 164-169.

VanTassel-Baska, J., Avery, L.D., Little, C.A., & Hughes, C.E. (2000). An evaluation of the implementation: The impact of the William and Mary units on schools. *Journal for the Education of the Gifted, 23*, 244-272.

VanTassel-Baska, J. & Little, C. A. (Eds.) (2003). *Content-based curriculum for high-ability learners.* Waco, TX: Prufrock Press.

Walberg, H. (1991). Productive teaching and instruction: Assessing the knowledge base. In H.C. Waxman and H.J. Walberg (Eds.), *Effective teaching: Current research* pp. 33-62. Berkeley, CA: McCutchan.

Williams, F. (1970). *Classroom ideas for encouraging thinking and feeling* (2nd ed.). Buffalo, NY: D.O.K. Publishers.